

ON THE IDENTITY OF *CUBANIELLA TROTTERI* RUSSO
(HYMENOPTERA: TANAOSTIGMATIDAE)

JOHN LASALLE¹ AND LUIS R. HERNÁNDEZ²

¹International Institute of Entomology, % The Natural History Museum,
Cromwell Road, South Kensington, London, SW7 5BD U.K.; and

²Museo Nacional de Historia Natural, Capitolio Nacional, La Habana 2,
Ciudad de La Habana 10200, Cuba

Abstract.—The genus *Cubaniella* Russo is synonymized with *Tanaostigmodes* Ashmead, and the placement of *C. trotteri* within *Tanaostigmodes* is discussed.

Resumen.—El género *Cubaniella* Russo es sinonimizado con *Tanaostigmodes* Ashmead, y se reconoce a *C. trotteri* dentro de éste último.

The New World Tanaostigmatidae were recently revised by LaSalle (1987), however he left both the genus *Cubaniella* and the species *C. trotteri* unplaced because he was unable to locate type material, or any other material assignable to this species. Since that time, Dr. G. Viggiani has located the holotype of *C. trotteri*, and kindly loaned it to us for study. Examination of this type reveals that *Cubaniella* is a junior synonym of *Tanaostigmodes* Ashmead, and that *C. trotteri* is a valid species which does not fit into any of the species groups defined by LaSalle (1987).

GENUS *TANAOSTIGMODES* ASHMEAD

Tanaostigmodes Ashmead, 1896:9,18-19. Type species *Tanaostigmodes howardii* Ashmead (original designation).

Cubaniella Russo, 1930:133-134. Type species *Cubaniella trotteri* Russo (original designation). **NEW SYNONYMY.**

Further synonyms of *Tanaostigmodes* are given by LaSalle (1987:13).

Cubaniella would key to *Tanaostigmodes* in the key to tanaostigmatid genera given by LaSalle (1987), and agrees completely with the description. It has remained unplaced solely because specimens have not been available for study previously.

Tanaostigmodes trotteri (Russo)

Tanaostigmodes trotteri (Russo). **NEW COMBINATION.**

Cubaniella trotteri Russo, 1930:134-139. Holotype ♀, Cuba, Havana, galls on *Belaira mucronata* [Portici, examined].

Diagnosis. *T. trotteri* is the only *Tanaostigmodes* with the stigmal vein swollen at junction of the marginal vein (Fig. 1), and this character should serve to distinguish it from any other New World species. Other important characters are: entire dorsum of mesosoma with coriaceous (engraved) sculpture; basal cell of fore wing without any setae on dorsal surface (some setae present on ventral surface); scape without

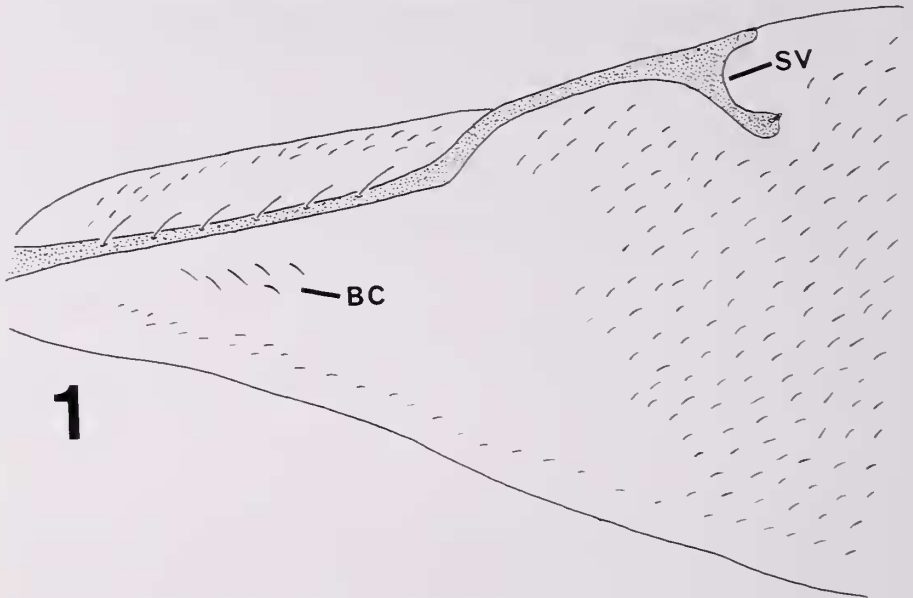


Fig. 1. *Tanaostigmodes trotteri* (Russo), ♀, base of fore wing. bc = basal cell (note that these setae are on the ventral surface of the wing); sv = stigmal vein).

ventral expansion, more than 3 times longer than wide; body without metallic coloration; scrobal impression not carinate; frons without transverse furrow.

Type material. Russo (1930) did not state how many specimens he had when he described *C. trotteri*, however he did state: "Tipo.—Coll. R. Labor. Entom. Portici." His use of the singular indicates that he did consider a unique specimen as the holotype, and we consider the specimen sent to us by Dr. Viggiani to be this holotype. It was the only specimen that Dr. Viggiani could locate in the collection in Portici, and it bears a label stating, "Cubaniella Trotteri Russo; Habana (Cuba)." We have added a holotype label to this specimen.

The holotype is glued to the point with the face down, so that the lower scrobes and area between the toruli are hidden. The antennae are broken (one antenna is missing the flagellum past F4, the other the flagellum past F2). It appears, however, that there should be at least some funicular segments that are quadrate and not distinctly longer than wide (see also illustrations in Russo, 1930).

Discussion. *T. trotteri* does not fit into any of the species groups defined by LaSalle (1987). It would key correctly as far as couplet 16 in his key to species of *Tanaostigmodes*. This couplet gives the options:

- 16. Scutellum coriaceous. Speculum separated from posterior margin of wing by more setae (on ventral surface) than a single line representing subcubital vein. Face and frons with scattered, minute punctures. 17
- 16'. Scutellum reticulate, imbricate, or with otherwise raised sculpture. Speculum usually open to posterior margin of wing, or at most separated by a single line of setae representing subcubital vein; only rarely separated from posterior margin of wing by

Table 1. **Caribbean Tanaostigmatidae.** Distributional information taken from LaSalle (1987). An asterisk (*) indicates that a species is known only from one locality. Abbreviations as follows: B, Barbados; BI, Bahama Islands; C, Cuba; CA, Central America; CI, Cayman Islands; D, Dominica; DR, Dominican Republic; F, Florida; G, Grenada; H, Haiti; J, Jamaica; M, Mexico; PR, Puerto Rico; SA, South America; T, Trinidad; VI, Virgin Islands.

| Species | Distribution | |
|--|----------------|--------|
| | Caribbean | Other |
| <i>Tanaoneura ashmeadi</i> Howard | *G | |
| <i>Tanaoneura flavilineata</i> LaSalle | *T | |
| <i>Tanaoneura portoricensis</i> (Crawford) | PR, VI | CA, SA |
| <i>Tanaostigma bennetti</i> LaSalle | *T | |
| <i>Tanaostigma chapadae</i> (Ashmead) | T | SA |
| <i>Tanaostigma coursetiae</i> Howard | DR, PR | CA, M |
| <i>Tanaostigma slossonae</i> (Crawford) | BI, C | F |
| <i>Tanaostigmodes anellarius</i> LaSalle | BI | M |
| <i>Tanaostigmodes dominicensis</i> LaSalle | *D | |
| <i>Tanaostigmodes haematoxyli</i> (Dozier) | C, CI, D, H, J | M |
| <i>Tanaostigmodes mayri</i> Ashmead | *G | |
| <i>Tanaostigmodes tenuisulcus</i> LaSalle | *BI | |
| <i>Tanaostigmodes tetartus</i> Crawford | B | SA |
| <i>Tanaostigmodes trotteri</i> (Russo) | *C | |

more setae than a single line. Face and frons usually without, rarely with, scattered minute punctures. 18

T. trotteri possesses a coriaceous (lightly engraved) scutellum, however the speculum is separated from the posterior margin of the wing by only a single line of setae, and the face and frons do not have any punctures. It can be separated from the two species of *Tanaostigmodes* which would key at couplet 16 as having the scutellum coriaceous (*T. kiefferi* (Mayr), *T. insculptus* LaSalle) by two additional characters.

In *T. trotteri* the stigmal vein is distinctly swollen basally where it joins marginal vein (Fig. 1). This character is unique among all species of *Tanaostigmodes*.

In *T. trotteri* the basal cell has no setae on the dorsal surface of wing (Fig. 1) (although there are 5–6 setae on the ventral surface). There are over 30 setae in the basal cell of *kiefferi* and *insculptus*.

Biology. *C. trotteri* has been reared from a gall on *Belaira mucronata* (Fabaceae: Faboidea) (Russo, 1930).

Caribbean Tanaostigmatidae: The 14 species of Tanaostigmatidae presently known from the Caribbean are listed in Table 1, along with their distribution within the Caribbean and outside of the region. Three species are known from Cuba, with *T. trotteri* being known only from Cuba.

Seven of the 14 species are known only from a single locality, however it is highly unlikely that tanaostigmatids actually display such a high percentage of endemism. This pattern is more likely to be due to inadequate collections and our poor knowledge of the Caribbean fauna than to most of these species actually being endemic to a single island.

It is certain that further collecting in the area will show that there are several more tanaostigmatid species present, and that the range of most species is greater than currently known. However, due to the fragility of island ecosystems, many species are probably already eliminated through much of their original range, so that we will never know the true extent of their former distributions.

ACKNOWLEDGMENTS

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LITERATURE CITED

- Ashmead, W. H. 1896. On the genera of the Eupelminae. Proc. Ent. Soc. Washington 4: 5-20.
- LaSalle, J. 1987. New World Tanaostigmatidae (Hymenoptera: Chalcidoidea). Contrib. Am. Ent. Inst. 23(1):1-181.
- Russo, G. 1930. Descrizione di Chalcididae galligeno nov. gen. e nov. sp. di Cuba (Antille). Boll. Lab. Zool. Gen. Agrar. R. Inst. Super. Agrar. Portici 24:132-139.

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